



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,913	12/29/2001	Motoki Kato	450100-4414.1	9795

20999 7590 06/26/2003

FROMMER LAWRENCE & HAUG  
745 FIFTH AVENUE- 10TH FL.  
NEW YORK, NY 10151

EXAMINER

AN, SHAWN S

ART UNIT PAPER NUMBER

2613

DATE MAILED: 06/26/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**10/032,913**

Applicant(s)  
**Kato Motoki**

Examiner  
**Shawn An**

Art Unit  
**2613**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Mar 18, 2003
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 18-29 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

Art Unit: 2613

## DETAILED ACTION

### *Response to Remarks*

1. Applicant's arguments with respect to claims 18-29, and the argument that was presented in the Preliminary Amendment (Remarks section) filed on 12/29/01, have been considered, but, nevertheless, are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 18-19, 22-24, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda (5,949,956) in view of Gonzales et al (5,617,145).

**Regarding claims 18, 23, and 26-27**, Fukuda discloses a signal coding apparatus/method, and a signal recording medium, comprising:

coding difficulty calculating means (101) for determining a coding difficulty for each unit time of an input signal;

means for obtaining a reference value of the allocation data amount (301 and 302) interrelated with the coding difficulty of the input signal for the each unit time based on a standardized relationship between coding difficulty and allocation data amount, wherein the standardized relationship is provided when a reference motion picture image sequence is coded by way of variable bit rate coding with a predetermined average value (Col. 6, lines 25-41);

Art Unit: 2613

means for modifying (104+) the reference value of the allocation data amount into an actual allocation data amount;

coding means (107) for generating coded data by coding the input signal for the each unit time according to the actual allocation data amount; and

transmitting the generated coded data (Col. 6, lines 1-3).

Fukuda does not specifically disclose that the relationship is provided when a reference motion picture image sequence is coded by way of variable bit rate coding with a predetermined average bit rate.

However, Gonzales et al teaches that average of the resulting picture bit allocation over time be equal to the target (predetermined) average picture bit allocation.(col. 12, lines 11-14).

Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing a signal coding apparatus/method, and a signal recording medium as taught by Fukuda to incorporate the concept as taught by Gonzales et al so that the relationship is provided, wherein the reference motion picture image sequence is coded by way of variable bit rate coding with a predetermined average bit rate as an efficient way to optimize bit rate allocation.

**Regarding claims 19 and 24**, Fukuda discloses means for modifying controlling the actual allocation data amount, so that a total of a bit amount generated when a signal of a time length which can be recorded on a recording medium is equal to or below a bit amount available in the recording medium for signal recording (Col. 6, lines 56-67 and Col. 7, lines 1-23).

**Regarding claim 22**, Fukuda discloses input signal being a moving picture image signal, and the coding difficulty (Fig. 2) is determined according to an image characteristic of the input image for each predetermined time and coding is carried out with an allocation data amount (102) reflecting human visual characteristic.

Art Unit: 2613

4. Claims 20-21, 25, and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda and Gonzales et al as applied to claims 18, 23, and 27 above, respectively, and further in view of Chung et al (5,686,982).

**Regarding claims 20-21, 25, and 28-29**, the combination of Fukuda and Gonzales et al does not specifically disclose the input signal being subjected to a pre-filter processing.

However, Chung et al disclose well known pre-filter processing (Fig. 3, element 33), which includes a low pass filter processing (Col. 5, lines 6-11).

Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing a signal coding apparatus/method, and a signal recording medium as taught by Fukuda to incorporate the well known low pass filter processing as taught by Chung et al so that Fukuda's pre-filter processing includes the low pass filter when suppressing the actual allocation sign amount below the reference value in order to prevent coding deterioration.

#### *Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn An whose telephone number (703) 305-0099 and schedule are Tuesday through Friday.

SHAWN S. AN  
PATENT EXAMINER



SSA

June 24, 2003